



## PUBLIC HEALTH FACT SHEET

## VX

### The Agent

VX is odorless and tasteless. It is an oily liquid that is amber in color. It evaporates very slowly. VX is primarily a hazard as a liquid, but if it is heated to very high temperatures, it can turn into small amounts of vapor (gas).

VX does not occur naturally in the environment. It is a nerve agent developed for use in chemical warfare. Nerve agents are similar to certain kinds of insect killers, but much more powerful. VX was developed in the United Kingdom in the 1950s. It is the most potent of all nerve agents.

Nerve agents affect the body's "off switch" for glands and muscles. Without an "off switch," the glands and muscles are constantly stimulated. The muscles may get so tired that breathing may stop.

If VX were released into the air, people could be exposed through skin contact, eye contact, or by breathing in VX mist. VX does not mix with water as easily as other nerve agents, but it could be released into water. If VX were released into water, people could be exposed by drinking the water or getting the contaminated water on their skin. If food were contaminated with VX, people could be exposed by eating the food. Clothing contaminated with VX vapor can release the nerve agent for about 30 minutes after contact, which can lead to the exposure of other people.

### Symptoms

If a person were exposed to VX vapor, symptoms would appear within a few seconds after exposure. If a person were exposed to VX liquid, symptoms could appear within a few minutes or as long as 18 hours after exposure.

People may not know they were exposed to VX because it has no odor. People exposed to a low or moderate dose of VX by breathing contaminated air, eating contaminated food or drinking contaminated water, getting contaminated water on the skin may experience some or all of the following symptoms within seconds to hours of exposure:

runny nose, watery eyes, small pinpoint pupils, eye pain, blurred vision, drooling and excessive sweating, cough, chest tightness, rapid breathing, diarrhea, increased urination, confusion, drowsiness, weakness, headache, nausea, vomiting and/or abdominal pain, slow or fast heart rate, abnormally low or high blood pressure

Even a tiny drop of nerve agent on the skin can cause sweating and muscle twitching where the agent touched the skin. Exposure to a large dose of VX by any route may result in these additional health effects: loss of consciousness, convulsions, paralysis, and respiratory failure possibly leading to death.

## **Treatment**

Treatment consists of removing VX from the body as soon as possible and providing supportive medical care in a hospital setting. Antidotes are available for VX. They are most useful if given as soon as possible after exposure.

## **Reducing the Risk**

Recovery from VX exposure is possible with treatment, but the antidotes must be used quickly to be effective. The best thing to do is avoid exposure.

If you think you may have been exposed to VX, quickly leave the area where the VX was released and get to fresh air. This is highly effective in reducing the possibility of death from exposure to VX vapor.

If the VX release was indoors, get out of the building. If the VX release was outdoors, move away from the area where the VX was released. Go to the highest ground possible, because VX is heavier than air and will sink to low-lying areas.

**If people think they may have been exposed, they should remove their clothing, rapidly wash their entire body with soap and water, and get medical care as quickly as possible.**

Quickly take off clothing that has liquid VX on it. Any clothing that has to be pulled over the head should be cut off the body instead of pulled over the head. If possible, seal the clothing in a plastic bag. Then seal the first plastic bag in a second plastic bag. Removing and sealing the clothing in this way will help protect people from any chemicals that might be on their clothes.

If clothes were placed in plastic bags, inform either the local or state health department or emergency personnel upon their arrival. Do not handle the plastic bags. If helping other people remove their clothing, remove the clothing quickly while avoiding contact with contaminated areas.

As quickly as possible, wash any liquid VX from the skin with large amounts of soap and water. If you experience burning eyes or blurred vision, rinse your eyes with plain water for 10 to 15 minutes. If VX has been swallowed, do not induce vomiting or give fluids to drink. Seek medical attention right away. Dial 911 and explain what has happened.

## **VX and Bioterrorism**

According to the Centers for Disease Control and Prevention (CDC), VX could be used as a biological weapon, resulting in sickness and death.

## **For More Information Contact**

- Your healthcare provider
- Your local department of health
- The New Jersey Dept. of Health and Senior Services  
Communicable Disease Service at (609) 588-7500
- You can also visit the following websites:  
The New Jersey Department of Health and Senior Services website at [www.nj.gov/health](http://www.nj.gov/health)  
The CDC website at <http://www.bt.cdc.gov/agent/vx>.